Enabling Independent Living
Verizon Wireless Solutions

Brandon Hart, M2M Solutions Specialist

Dennis Dohrmann, Advanced Solutions Architect

October 14, 2013

Talking Points

- What is the Problem?

- What are Connected Devices?

- Why Verizon?

- Example solutions

- Questions

What is the Problem?

• Aging population

• Limited resources

• Rising costs of healthcare

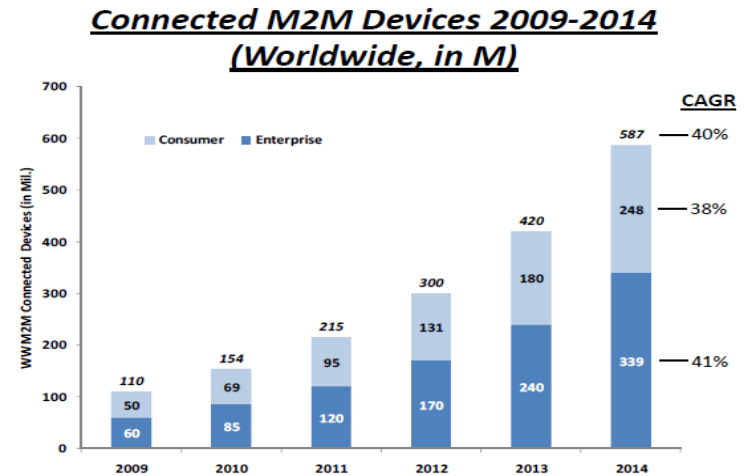• Disconnected from Family & Society

• Relocation

What are Connected Devices?
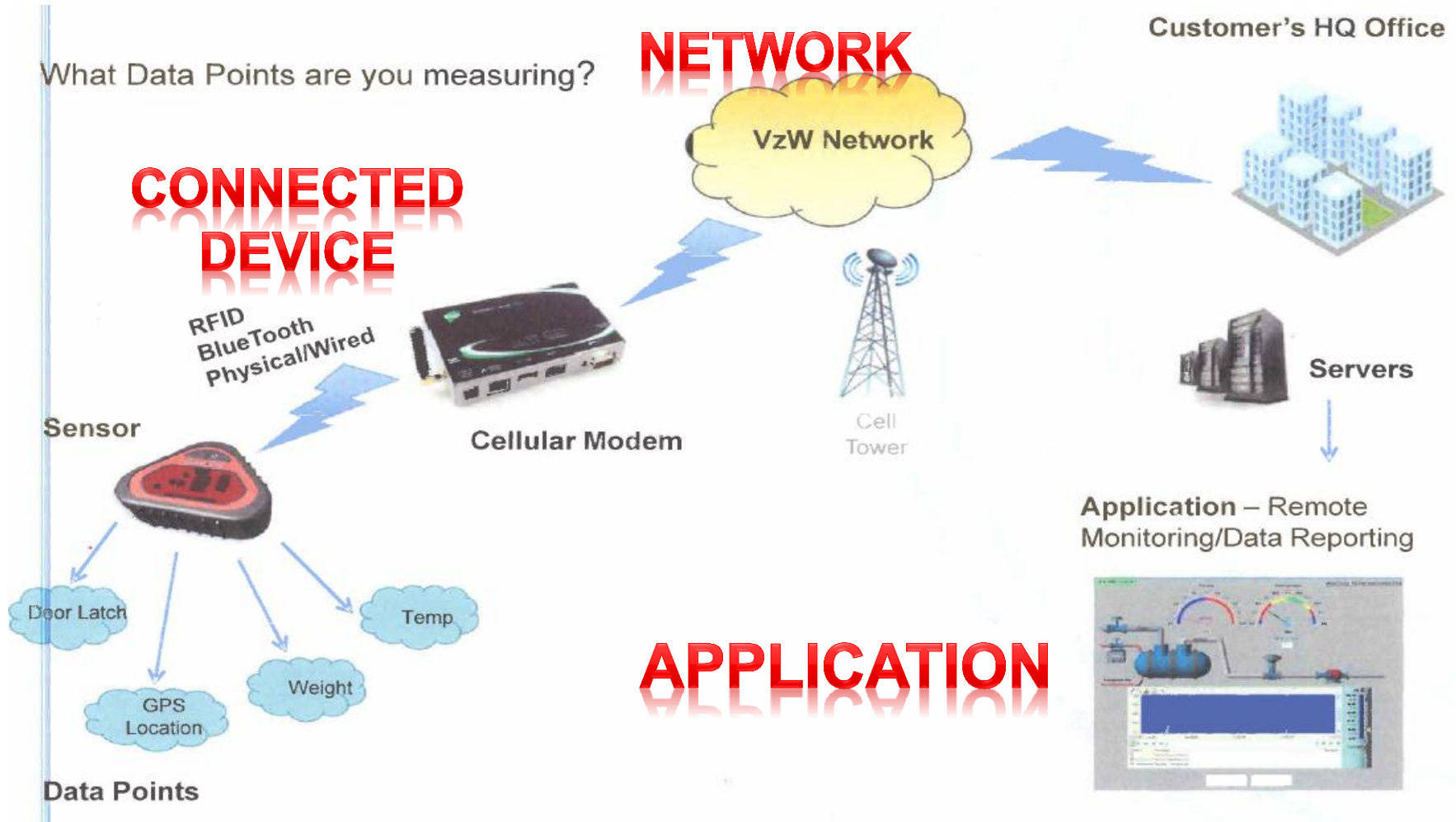
Visibility & Automation of data in the field

AKA
- "Internet of Things"
- "M2M"
- "Machine to Machine"

Connected M2M Devices 2009-2014
(Worldwide, in M)

Year	Consumer	Enterprise	Total	CAGR
2009	50	60	110	
2010	69	85	154	
2011	95	120	215	
2012	131	170	300	
2013	180	240	420	38%
2014	248	339	587	40% (consumer), 41% (enterprise)

WW M2M Connected Devices (in Mil.)

Device	Network	Application
Embedded	POTS	* Software that makes sense of the captured data
Modem	Wi-Fi	
Sensor	Wireless Carrier	
Location Tags	Bluetooth / Zigbee	(Cloud or software based)

What are Connected Devices?

Machine to Machine Fundamental Elements (D-N-A)

What Data Points are you measuring?

NETWORK

Customer's HQ Office

VzW Network

CONNECTED DEVICE

RFID
BlueTooth
Physical/Wired

Sensor

Cellular Modem

Cell Tower

Servers

Application – Remote Monitoring/Data Reporting

Door Latch

Temp

APPLICATION

GPS Location

Weight

Data Points

Why Verizon?

• Broad portfolio of devices and modules

• The most reliable and secure network available

• Flexible / Turnkey Solutions

• Easily connect with remote assets. Exchange data in a proven, secure and budget-friendly manner.

• Automate processes. Analyze and act on real-time information, and get more done with available resources, resulting in greater business efficiency.

• Access to best in class solutions partners

National SingleRate Home Airtime Rate and Coverage Area
No Coverage Area
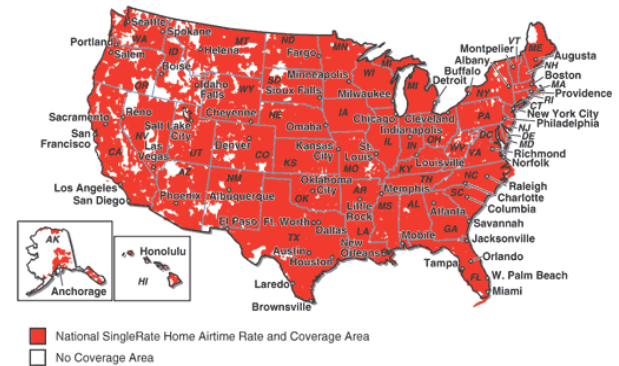
Why Verizon - LTE
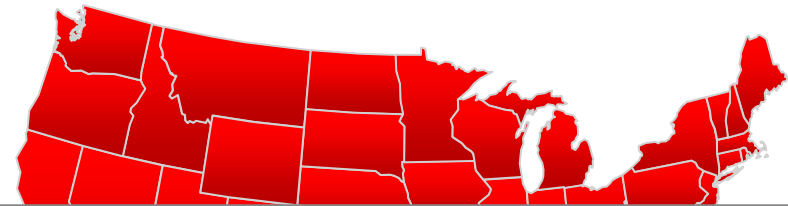
Fast

Up to 10x faster than 3G

Low Latency

One-Fourth of 3G latency

Excellent Coverage and In-Building Penetration

Over 300 million people and 500 markets covered

Inherent global mobility

Over 85% of the world operators adopting LTE

The only carrier with contiguous 700 MHZ spectrum

305M POPS with 22 MHz

	Downlink	**Uplink**
Peak Data Rates	60 - 86 Mbps	20 - 28 Mbps
Avg Data Rates	**5 - 12 Mbps**	**2 - 5 Mbps**
Fringe Data Rates	1 - 3 Mbps	0.5 - 1.5 Mbps

Example: Home Health Monitoring

Need: Ability to keep track of health statistics remotely

- Patients require continual monitoring

- Secured to prevent external access

- Must be easy

Solution: Home Healthcare Monitoring Solution

- No patient setup

- Secure

- Can be used where needed

- Efficient - Saves time and money

Blood Glucose Meter

Blood Pressure Monitor

Pulse Oximeter

Peak Flow Meter

Weight Scales

Example: Emergency Response System

Need: Individual requiring immediate assistance

- Notify emergency responders

- Panic button to easily call for help

- Minimal interaction required

- May be unable to speak or provide location

Solution: Wearable monitor with emergency button

- One button emergency notification

- Monitoring for extended horizontal position, heartbeat

- Can automatically inform necessary parties if condition detected

Example: Location Tracking

Need: Ability to Track Wandering Individuals

* Must track both indoors and outdoors

* Individual needs to call for help if lost

* Small and lightweight

Solution: Wearable tracker with alert button

* One button alerting to pre-determined email or mobile numbers

* Provides for alerts when exiting or entering predefined locations

* Can provide location based on GPS

Example: Ruggedized Tablets

Need: Rugged hardware for staff

- Providers require reliable devices

- Reporting functions are critical

- Invoicing and payments

Solution: "Blank Slate" Android Tablets & Applications

- Fully ruggedized tablet

- Verizon secure Private Network for access to internal resources

- Reduction in paper reporting and data entry

- Allows provider flexibility in applications used

Example: Vehicle Tracking

Need: Track the vehicles of staff members

- Non-permanent installation

- Diagnostics & Maintenance

- Vehicle Location (realtime, breadcrumb, geofence, proximity)

- Vehicle Idle Time

Solution: Vehicle Tracking Solution

- Device on vehicle, plugged into standard OBDII port

- Reports to "cloud application" for GPS location, notifications, reporting, and maintenance

- Integrates into existing vehicle maintenance and GIS systems

Example: Video Chat

Need: Video Conferencing System

- Simple operation

- Users may have very limited mobility

- Maintain contact with family, providers, friends

Solution: Simple Voice Chat Applicatio[n] on Tablets

- Don't require external internet connection

- Lightweight devices

- Tablets provide multiple capabilities. (E-reader, Email, internet, etc.)
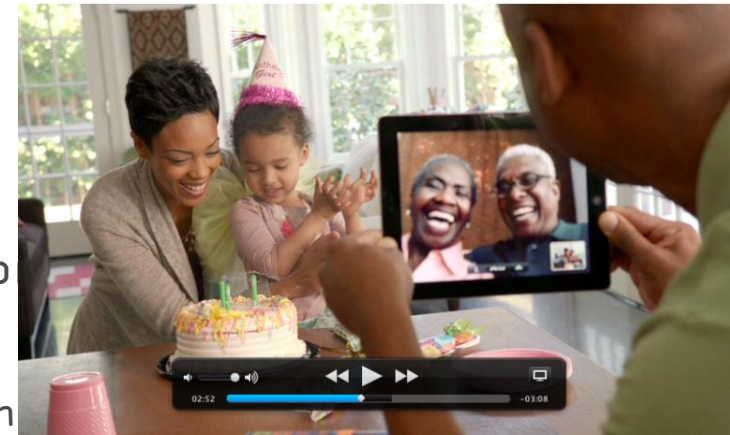
Example: Home Internet

Need: Basic Internet Connectivity

*   Simple operation

*   Ability to work (nearly) anywhere

*   Professional Installation

Solution: Verizon HomeFusion

*   Provides internet connectivity on the Verizon
    4G LTE Network

*   Provides connectivity to rural locations
    where other services may not be available

Q & A

Questions?

Thank you!